

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00717

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
Int. Cl. <sup>7</sup> : C07D 235/26, 235/28, 307/83; A61K 31/4184, 31/585		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPIDS, CA, Medline. Substructure search and keyword search ('MIF', 'macrophage', 'inhibit?', 'factor', '?benzim?', 'benzothi?', 'benzox?', 'benzofur?', 'cytokine')		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/77083 A1 (GLAXO GROUP LIMITED) 18 October 2001 See page 24 Example 1, and page 6 compound (XII)	31-34
X	WO 01/92239 A1 (WARNER-LAMBERT COMPANY) 6 December 2001 See examples	31-34
X	WO 01/44223 A1 (ABBOTT LABORATORIES) 21 June 2001 See examples, claims	31-34
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"B" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>		
Date of the actual completion of the international search 3 July 2003		Date of mailing of the international search report 18 JUL 2003
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No: (02) 6285 3929		Authorized officer  DAVID GRIFFITHS Telephone No : (02) 6283 2628

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/36402 A1 (CIBA SPECIALITY CHEMICALS HOLDING INC.) 22 July 1999 See page 12, compound IV, page 13 compound IX, and fourth compound on page 13.	31-34, 36
X	WO 96/10026 A1 (JANSSEN PHARMACEUTICA N.V.) 4 April 1996 See page 6, compound (I-d)	31-34
X	EP 0462831 A2 (IMPERIAL CHEMICAL INDUSTRIES PLC) 27 December 1991 See page 12, line 38; page 13 lines 35 and 51	31-34
X	FR 2688504 A1 (SYNTHELABO SOCIETE ANONYME) 17 September 1993 See compounds of formula (I) and (IV)	31-34
X	US 4400319 (STEFAN HARI ET AL.) 23 August 1983 See columns 6 and 7, Table 1	31-34, 36
X	DD 292452 A5 (KARL MARX UNIVERSITAT) 1 August 1991 See compounds of formula (I) and examples	31-34
X	US 4329477 (RUDIGER SCHUBART ET AL.) 11 May 1982 See whole document	31-34
X	US 3775333 (F. F. LOFFELMAN ET AL.) 27 November 1973 See Example 1	31, 33, 34
X	GB 876015 (CHEMISCHE WERKE ALBERT) 30 August 1961 See first page, right-hand column, lines 69-74	31-34
X	US 2933503 (R. L. CLARK ET AL.) 19 April 1960 See examples	31-34
X	US 2843597 (R. L. CLARK ET AL.) 15 July 1958 See whole document	31-34
X	STN File HCA, Abstract 115:256067, & E. KAWASHIMA ET AL. "2,5,6-Trichlorobenzimidazole. Synthesis of a Precursor for 2-Substituted 5,6-Dichlorobenzimidazoles" Nucleic Acid Chem. 1991, 4, 24-26 Abstract and CAS Registration No. 2033-29-6	31-34

## INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	STN File HCA, Abstract 52:77210 & R. L. CLARK ET AL. "Synthesis of Some Substituted Benzimidazolinones" Journal of the American Chemical Society 1958, 80, 1657-1662 Abstract	31-34
X	STN File HCA, Abstract 52:72309 & L. S. EFROS ET AL. "Imidazole Derivatives. XVIII. Nitration of 5-Methylbenzimidazoles" Zhurnal Obshchei Khimii 1958, 28, 62-69 See abstract	31-34

# INTERNATIONAL SEARCH REPORT

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## Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos : 1-35 (In part)  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
Claims 1-35 relate to such a broad number and variety of benzo-fused heterocyclic compounds that it was impossible to conduct a search over the entire breadth of the claims. The search has been limited to the benzimidazolin-2-ones disclosed in the examples.
  
3. ☐ Claims Nos :  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

## Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member		
WO	200177083	AU 200156272	EP	1272473	
WO	200192239	AU 200159618	BR	200111301	CA 2409006
		EP 1286975	NO	20025762	
WO	200144223	AU 200122717	BR	200012502	CA 2393027
		EP 1250332			
WO	9936402	AU 26156/99	EP	1047672	US 6087480
WO	9610026	AU 36080/95	BR	9509035	CA 2200579
		CN 1160401	CZ	9700919	EP 784619
		FI 971273	HU	77311	IL 115412
		NO 971375	NZ	293604	PL 319998
		US 5872131	ZA	9508086	
EP	462831	JP 4243865	US	5179115	US 5364877
		US 5462953	US	5278177	
FR	2688504	NONE			
US	4400319	CA 1180325	EP	51560	JP 57094045
DD	292452	NONE			
US	4329477	DE 3008159	EP	35185	JP 56135478
US	3775333	AR 196761	AU	54284/73	BE 801679
		CA 1001804	DE	2332428	FR 2190911
		GB 1379530	IT	985625	JP 49052783
		NL 7306037	ZA	7302152	
GB	876015	NONE			
US	2933503	NONE			
US	2843597	NONE			
END OF ANNEX					